



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,220	11/07/2000	Dan Kikinis	004688.P009	1136

52940 7590 07/12/2006

TODD S. PARKHURST
HOLLAND & KNIGHT LLP
131 S. DEARBORN STREET
30TH FLOOR
CHICAGO, IL 60603

EXAMINER

LONSBERRY, HUNTER B

ART UNIT PAPER NUMBER

2623

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/708,220

Applicant(s)

KIKINIS ET AL.

Examiner

Hunter B. Lonsberry

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-10,13-27,29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-10,13-21, 22-27 and 29-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 4/27/06 have been fully considered but they are not persuasive.

Applicant argues that there is no plurality of virtual worlds in Finseth, that Finseth's categorical program guide links 136 are not applicant's Virtual worlds. That Finseth's categorical links represent different formats in which channel and topical subjects are organized and displayed on a non-selectable background. This is different from and opposite to what applicant's "virtual worlds" represent, i.e. selectable background themes upon which channel and topical subjects are displayed (Amendment pages 7-9)

Regarding applicant's argument, Clanton discloses a plurality of virtual worlds (Figure 4, archive 71, critics café 92, poster wall 80) and a presentation engine which enables a user to choose a virtual world according to preference (column 8, lines 3-19, 48-column 9, line 64) each virtual world displays corresponding program guide information (user views information on pizza delivery services, merchant information, news, weather or sports programming) within the chosen virtual world (column 12, lines 10-26). The examiner notes that claim 1 is silent regarding the display of a different themed interface for each virtual world. The broadest possible reasonable interpretation of the term virtual world includes, different areas (archive 71, critics café 92, poster wall

Art Unit: 2623

80) each of which displays their own corresponding program guide information (VOD, pizza delivery services, merchant information, news, weather or sports programming) as taught by Clanton.

The independent claims are completely silent regarding any sort of background theme or organizational pattern selected by the user, rather the claims recite that the user may choose one of the virtual worlds and program guide information is displayed within the chosen virtual world.

Applicant argues that Finseth and Clanton fail to teach, suggest or even mention the use of a presentation engine or drivers (amendment page 9).

Regarding applicant's argument, Clanton is relied upon to teach the use of a presentation engine (the graphical user interface), see column 8, lines 3-19, 48-column 9, line 64.

With respect to drivers:

From <http://webopedia.com/TERM/d/driver.html>

*A program that controls a device. Every device, whether it be a printer, disk drive, or keyboard, **must** have a driver program. Many drivers, such as the keyboard driver, come with the operating system. For other devices, you may need to load a new driver when you connect the device to your computer. In DOS systems, drivers are files with a.SYS extension. In Windows environments, drivers often have a.DRV extension.*

A driver acts like a translator between the device and programs that use the device. Each device has its own set of specialized commands that only its driver knows. In contrast, most programs access devices by using generic commands. The driver, therefore, accepts generic commands

from a program and then translates them into specialized commands for the device. (Emphasis placed by the Examiner.)

While Finseth and Clanton fail to explicitly state the term driver, a software component of some kind is **required** in order for the user interfaces of Clanton and Finseth to communicate with the respective hardware components of each device. Nonetheless, the Examiner has supplied U.S. Patent 6,990,677 to Pietraszak to teach these features in combination with Finseth and Clanton.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 8-9, 20-23, and 26-27, 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,754,906 to Finseth in view of U.S. Patent 5,745,710 to Clanton and U.S. Patent 6,990,677 to Pietraszak.

Regarding claim 1, Finseth discloses a 3d enabled electronic program guide (Figure 8a/b, column 16, lines 32-34), a user may select the style of the guide they wish

Art Unit: 2623

to utilize (column 20, lines 57-59), receiver 64 receives EPG information from an EPG data transmitting system (column 5, line 33-38, line 60-column 6, line 38).

Finseth fails to disclose a plurality of virtual worlds, which are presented to the user for selection and a presentation engine, which enables a user to choose a virtual world according to preference, displaying program guide information within the chosen world, neither does Finseth explicitly disclose the use of a plurality of drivers, one of the drivers enabling the presentation engine to communicate with a television system for replenishing EPG information.

Clanton discloses a plurality of virtual worlds (Figure 4, archive 71, critics café 92, poster wall 80) and a presentation engine which enables a user to choose a virtual world according to preference (column 8, lines 3-19, 48-column 9, line 64) each virtual world displays corresponding program guide information (user views information on pizza delivery services, merchant information, news weather or sports programming) within the chosen virtual world (column 12, lines 10-26),

a memory in the system, which contains a plurality of objects (column 7, lines 13-18), one class of objects providing the plurality of virtual worlds a user views (column 7, lines 13-18, column 10, lines 26-29).

an intuitive interface which is fun and interesting to use is provided (column 2, lines 30-33).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify Finseth to utilize a plurality of words with corresponding program

Art Unit: 2623

guide information, which a user may select as taught by Clanton, thus providing an intuitive interface, which is fun and interesting.

The combination of Finseth and Clanton, while requiring some mechanism to communicate with the hardware of the device, fails to explicitly disclose the use of drivers.

Pietraszak discloses in figure 3, the use of an EPG loader which makes use of a device driver 65 and a number of API's to interface with the hardware of a STB and retrieve EPG data from an EPG provider (column 9, line 17-column 10, line 33, drivers are software modules designed to interface with a particular hardware component) and allowing a user to print out EPG information, and access EPG information from a number of different providers.

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the combination of Finseth and Clanton to utilize the drivers, multiple providers and printing functions of Pietraszak for the advantages of enabling a user to print out EPG information so that they may view it away from their television and ensure that the hardware and software components can communicate with one another.

Regarding claims 2, and 21, Finseth discloses in figure 3, a receiver 64 on which the EPG is run (column 9, lines 59-65, column 11, lines 23-29).

Regarding claims 5 and 23, Clanton discloses in figure 12, that a user may change channels during a movie (column 11, lines 29-44).

Clanton does not disclose a class of objects describing schedule times, including a channel id or title that may be converted into an actual channel number or program ID.

Finseth discloses a class of objects which includes descriptive language describing schedule times, thus class of objects having a channel id which may be converted into an actual channel number or program identification (column 7, lines 19-46, column 8, lines 22-34, figure 7).

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the object classes of Clanton to include the descriptive objects of Finseth, thus enabling a user to readily identify a local channel by call sign and aide in the selection of programming.

Regarding claims 8 and 26, Clanton is relied upon to teach that a virtual world is automatically selected to be presented by the presentation engine based on the program content selected by the user (a user selects an "extra" (program content) and the corresponding virtual world content is automatically rendered, column 12, lines 1-26, 46-50).

Regarding claims 9 and 27, Clanton discloses a number of virtual worlds.

Clanton fails to disclose a virtual world displayed in a matrix of virtual boxes.

Finseth discloses in figure 7, a matrix of rectangular boxes, which a user may use to view future programming, the layout provides an intuitive interface as users are accustomed to reading from top to bottom (column 16, lines 14-19).

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Clanton to utilize a matrix of rectangular boxes as taught by Finseth, thus providing an intuitive layout as viewers are accustomed to reading from top to bottom.

Regarding claim 20, Finseth discloses a 3d enabled electronic program guide (Figure 8a/b, column 16, lines 32-34), a user may select the style of the guide they wish to utilize (column 20, lines 57-59)

A receiver 64 receives EPG information from an EPG data transmitting system (column 5, line 33-38, line 60-column 6, line 38). Finseth inherently includes drivers as drivers are required in order to communicate with a hardware device..

Finseth fails to disclose a plurality of virtual worlds and a presentation engine, which enables a user to choose a virtual world according to preference and the use of drivers enabling the presentation engine to communicate with a TV system for replenishing program information.

Clanton discloses a plurality of objects for selection (column 7, lines 13-18, column 10, lines 26-29, Figure 4, archive 71, critics café 92, poster wall 80)

a presentation engine, which enables a user to choose a virtual world according to preference (column 8, lines 3-19, 48-column 9, line 64), each virtual world displays corresponding program guide information (user views information on pizza delivery services, merchant information, news, weather or sports programming) within the

Art Unit: 2623

chosen virtual world (column 12, lines 10-26), an intuitive interface which is fun and interesting to use is provided (column 2, lines 30-33).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify Finseth to utilize a plurality of words that a user may select, each world displaying corresponding program guide information as taught by Clanton, for the advantage of providing an intuitive interface, which is fun and interesting.

The combination of Finseth and Clanton, while requiring some mechanism to communicate with the hardware of the device, fails to explicitly disclose the use of drivers.

Pietraszak discloses in figure 3, the use of an EPG loader which makes use of a device driver 65 and a number of API's to interface with the hardware of a STB and retrieve EPG data from an EPG provider (column 9, line 17-column 10, line 33, drivers are software modules designed to interface with a particular hardware component) and allowing a user to print out EPG information, and access EPG information from a number of different providers.

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the combination of Finseth and Clanton to utilize the drivers, multiple providers and printing functions of Pietraszak for the advantages of enabling a user to print out EPG information so that they may view it away from their television and ensure that the hardware and software components can communicate with one another.

Regarding claims 29-30, Clanton discloses that a user may choose a virtual world to display programming information (column 10, lines 34-43). Clanton inherently enables a programmer to choose a virtual world to display programming information, as a programmer is required to create the user interface and designate which module within the interface would carry and display the programming information.

3. Claims 10, 13-15, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,754,906 to Finseth in view of U.S. Patent 5,745,710 to Clanton.

Regarding claim 10, Finseth discloses a 3d enabled electronic program guide (Figure 8a/b, column 16, lines 32-34), a user may select the style of the guide they wish to utilize (column 20, lines 57-59), receiver 64 receives EPG information from an EPG data transmitting system (column 5, line 33-38, line 60-column 6, line 38).

Finseth fails to disclose a plurality of virtual worlds, which are presented to the user for selection and a presentation engine, which enables a user to choose a virtual world according to preference, displaying program guide information within the chosen world, neither does Finseth explicitly disclose the use of a plurality of drivers, one of the drivers enabling the presentation engine to communicate with a television system for replenishing EPG information.

Clanton discloses a plurality of virtual worlds (Figure 4, archive 71, critics café 92, poster wall 80) and a presentation engine which enables a user to choose a virtual

Art Unit: 2623

world according to preference (column 8, lines 3-19, 48-column 9, line 64) each virtual world displays corresponding program guide information (user views information on pizza delivery services, merchant information, news weather or sports programming) within the chosen virtual world (column 12, lines 10-26),

a memory in the system, which contains a plurality of objects (column 7, lines 13-18), one class of objects providing the plurality of virtual worlds a user views (column 7, lines 13-18, column 10, lines 26-29).

an intuitive interface which is fun and interesting to use is provided (column 2, lines 30-33).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify Finseth to utilize a plurality of words with corresponding program guide information, which a user may select as taught by Clanton, thus providing an intuitive interface, which is fun and interesting.

Regarding claim 13, Clanton discloses a memory in the system, which contains a plurality of objects (column 7, lines 13-18), one class of objects providing the plurality of virtual worlds a user views (column 7, lines 13-18, column 10, lines 26-29).

Regarding claim 14, Clanton discloses that the virtual worlds contain a plurality of objects, each object linked to an item to display (column 8, lines 48-61, Figures 5 and 8).

Regarding claim 15, Clanton discloses in figure 12, that a user may change channels during a movie (column 11, lines 29-44).

Clanton does not disclose a class of objects describing schedule times, including a channel id or title that may be converted into an actual channel number or program ID.

Finseth discloses a class of objects which includes descriptive language describing schedule times, thus class of objects having a channel id which may be converted into an actual channel number or program identification (column 7, lines 19-46, column 8, lines 22-34, figure 7).

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the object classes of Clanton to include the descriptive objects of Finseth, thus enabling a user to readily identify a local channel by call sign and aide in the selection of programming.

Regarding claim 18, Clanton is relied upon to teach that a virtual world is automatically selected to be presented by the presentation engine based on the program content selected by the user (a user selects an "extra" (program content) and the corresponding virtual world content is automatically rendered, column 12, lines 1-26, 46-50).

Regarding claim 19, Clanton discloses a number of virtual worlds.

Clanton fails to disclose a virtual world displayed in a matrix of virtual boxes.

Finseth discloses in figure 7, a matrix of rectangular boxes, which a user may use to view future programming, the layout provides an intuitive interface as users are accustomed to reading from top to bottom (column 16, lines 14-19).

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Clanton to utilize a matrix of rectangular boxes as taught by Finseth, thus providing an intuitive layout as viewers are accustomed to reading from top to bottom.

4. Claims 6 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,754,906 to Finseth in view of U.S. Patent 5,745,710 to Clanton in further view of U.S. Patent 5,850,218 to LaJoie.

Regarding claims 6 and 24, Finseth discloses an EPG.

Finseth and Clanton do not disclose that the object class containing the psuedo descriptive language included localized aspects.

LaJoie discloses an EPG Figure 16, in which a location station ID name 370 is associated with a channel number 372, a service table 103, utilized by the terminal identifies a channel source, and its corresponding descriptive information such as call sign or logo by referring to column 125 within table 103 (column 16, lines 29-51).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the combination of Finseth and Clanton to include localized

Art Unit: 2623

information as taught by LaJoie, thus enabling a user to easily recognize a local channel by its station ID name.

5. Claims 7 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,754,906 to Finseth in view of U.S. Patent 5,745,710 to Clanton in further view of U.S. Patent 6,240,555 to Shoff.

Regarding Claims 7 and 25, Finseth discloses in Figure 9, an operating menu 124 in which a user may purchase items through an electronic catalog (column 20, lines 23-30).

Finseth and Clanton fail to disclose a number of non-EPG objects including interaction objects used for e-commerce conflated with one or more virtual worlds.

Shoff discloses an EPG in which a user may activate an interactive mode (virtual world) which is thematically related to a television program, in Figures 8b/c, a user may activate a button 220 which allows a user to open a merchandise catalog and order a product (column 10, lines 34-58, column 11, lines 3-11, 39-44, column 12, lines 7-23).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the combination of Finseth and Clanton to include the e-commerce mode of Shoff thus allowing a user to purchase products related to a virtual world, and providing an increased sales opportunity by taking advantage of a user's affinity to the virtual world.

Art Unit: 2623

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,754,906 to Finseth in view of U.S. Patent 5,745,710 to Clanton and U.S. Patent 6,990,677 to Pietraszak in further view of U.S. Patent 5,850,218 to LaJoie.

Regarding claim 16, Finseth discloses an EPG.

The combination of Finseth, Clanton and Pietraszak do not disclose that the object class containing the psuedo descriptive language included localized aspects.

LaJoie discloses an EPG Figure 16, in which a location station ID name 370 is associated with a channel number 372, a service table 103, utilized by the terminal identifies a channel source, and its corresponding descriptive information such as call sign or logo by referring to column 125 within table 103 (column 16, lines 29-51).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the combination of Finseth, Clanton and Pietraszak to include localized information as taught by LaJoie, thus enabling a user to easily recognize a local channel by its station ID name.

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,754,906 to Finseth in view of U.S. Patent 5,745,710 to Clanton and U.S. Patent 6,990,677 to Pietraszak in further view of U.S. Patent 6,240,555 to Shoff.

Claim 17, Finseth discloses in Figure 9, an operating menu 124 in which a user may purchase items through an electronic catalog (column 20, lines 23-30).

Art Unit: 2623

The combination of Finseth, Clanton and Pietraszak fail to disclose a number of non-EPG objects including interaction objects used for e-commerce conflated with one or more virtual worlds.

Shoff discloses an EPG in which a user may activate an interactive mode (virtual world) which is thematically related to a television program, in Figures 8b/c, a user may activate a button 220 which allows a user to open a merchandise catalog and order a product (column 10, lines 34-58, column 11, lines 3-11, 39-44, column 12, lines 7-23).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the combination of Finseth, Clanton and Pietraszak to include the e-commerce mode of Shoff thus allowing a user to purchase products related to a virtual world, and providing an increased sales opportunity by taking advantage of a user's affinity to the virtual world.

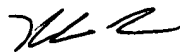
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 571-272-7298. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HBL 
Hunter Lonsberry
Patent Examiner
Art Unit 2623